

ABSTRACT OF THE DISCLOSURE

An ophthalmic lens, such as multifocal contact lens, that is worn on the surface of the eye and has a blended design for a segmented optical zone. The lens has an anterior surface and an opposite posterior surface, wherein the anterior surface includes a vertical meridian, a horizontal meridian, a central optical zone having at least a first optical zone for primary gaze, a second optical zone for down-gaze and an optical blending zone between the first and second optical zones. The optical blending zone has a surface that ensures a smooth surface transition from the first optical zone to the second optical zone and that allows the first and second optical zone to be designed independently and optimally so that ghost images or blur from the transition between the first and second optical zones can be minimized or eliminated. Image blur from the blend zone that subtends the pupil is minimized by the magnitude of the curvature of the blend zone. The optical zones will have the optimal aberration parameters to control vision.

* * * *